



INDEPENDENT BROADCAST CONSULTANTS, INC

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Received & Inspected

OCT 9 - 2009

FCC Mail Room

October 8, 2009

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
9300 East Hampton Drive
Capitol Heights, MD 20743

- via Federal Express-

Re: RM No. 11560
In Re: Petition for Rulemaking
du Treil, Lundin & Rackley, Inc.
Hatfield & Dawson
Modification of Section 73.182(q)
of the Commission's Rules

Dear Ms. Dortch:

Independent Broadcast Consultants, Inc., of the above-listed address, submits the attached Formal Comment in the referenced proceeding, a Petition for Rulemaking to modify Section 73.182(q), Footnote 1 of the Commission's technical rules.

In accordance with Sections 1.51, 1.405 and 1.419 of the Rules, the original and four (4) copies are submitted. In addition, one copy of the enclosed has been submitted each of the two petitioners in this proceeding, with a Certificate of Service properly attached.

The Commission's thoughtful consideration of this comment will be appreciated.

Respectfully submitted,

William J. Sitzman
President
Independent Broadcast Consultants, Inc.

cc: Mr. Ronald D. Rackley, P.E.
Mr. Benjamin F. Dawson III, P.E.

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11/10/09

Before the
Federal Communications Commission
Washington, D.C. 20554

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In the matter of:)
)
Modification of Section 73.182(q),)
Footnote 1, to Promote Improvement) RM No. 11560
of Nighttime Service by AM Radio)
Stations by Eliminating the)
"Ratchet Clause")

FORMAL COMMENT

by

Independent Broadcast Consultants, Inc.

To: The Commission

Independent Broadcast Consultants, Inc. ("IBC") of 110 County Road 146, Trumansburg, New York 14886, hereby submits its Formal Comment on the above-referenced Petition for Rulemaking (the "Petition") submitted by the engineering consulting firms of du Treil, Lundin & Rackley, Inc. and Hatfield and Dawson ("Petitioners"), said Petition proposing modification of Section 73.182(q), Footnote 1 of the Commission's rules for AM broadcast allocation. The proposed modification would delete the so-called "ratchet clause" which requires certain AM broadcast modification applicants to propose up to a ten per cent (10%) reduction in nighttime skywave interference levels to impacted co-channel or adjacent channel stations. For the reasons stated below, IBC wholeheartedly supports the Petitioners' proposal.

COMMENTS QUALIFICATIONS:

IBC, founded by its president, William J. Sitzman, has served as a technical consultant to the broadcast industry for more than 35 years. Over that period, IBC has represented more than 600 clients in the fields of broadcast allocation; facility design, construction oversight and documentation; and regulatory compliance. A disproportionate amount of its engineers' time and effort is devoted to the AM service. In fact, IBC remains one of the diminishing number of consulting firms that specializes in AM. As such, Mr. Sitzman and his staff are familiar with the "ratchet clause" and how it impedes established broadcasters from enhancing service to their communities from otherwise-sound technical improvements. Given its experience, IBC believes it is well qualified to address the Petition at hand.

BACKGROUND:

The so-called "ratchet clause" at issue in this proceeding was implemented in 1991 through the adoption of MM Docket No. 87-267, a wide-ranging technical proceeding which sought to revitalize the AM service through more strict allocation criteria, collectively referred to in the engineering community as the "New AM Rules." The nighttime interference reduction component to Docket 87-267 was, at the time, viewed as a compromise between previous regulation which restricted high-interfering nighttime stations to a mere hold-the-line standard for co-channel protection, and a tentatively-proposed much tougher standard which might have established a universal nighttime limitation as low as 1 mV/m. 1/ The final compromise, in the words of the Commission at the time, *"provides a balance between the ideal and the pragmatic."*

Under the final regulatory language, nighttime interferers were (and still are) grouped into three separate categories. Those stations which contribute to another station's 50% exclusion RSS would have to reduce that interfering limitation by ten per cent (10%) or to the 50% exclusion level (whichever reduction is less) whenever the station proposed a nighttime technical modification. Those stations whose nighttime contribution entered another station's 25% exclusion, but not 50% exclusion, RSS would merely be required to restrict proposed limitation to licensed levels. And stations whose contribution failed to enter another station's 25% RSS could raise limitation up to, but not exceeding, the 25% RSS threshold.

Simultaneously with the adoption of MM Docket No. 87-267, the Commission implemented previously-authorized revisions in the calculation of domestic skywave interference. 2/ The amended algorithm had the effect of altering, sometimes in a dramatic way, the calculation of interference from one station to another.

At the time the Commission adopted MM Docket No. 87-267 in 1991, the Report's writers acknowledged the new rules were not perfect. Citing concerns raised by that proceeding's commenters, the Report & Order states:

"Three points stand out - flexibility, coverage and noise. Of the three, flexibility is the most difficult to resolve because it requires a balance between our overall goal of reducing interference in the AM service and the understandable desire of broadcasters to improve their stations. The balance is delicate because as the interference restrictions increase, flexibility decreases." 3/

1/ REPORT & ORDER in MM Docket No. 87-267; Adopted Sept. 26, 1991; Released Oct. 25, 1991; paragraphs 61-75.

2/ REPORT & ORDER in MM Docket No. 88-508, 5 FCC Rcd 4482 (1990).

DISCUSSION:

As stated previously, IBC endorses the referenced Petition for Rulemaking which would amend Section 73.182(q), Footnote 1 of the Rules by removal of the "ratchet clause" for high interfering stations. This commenter agrees with the Petition's authors, both highly experienced and reputable engineering firms, that:

"...this requirement [the 'ratchet clause']. in addition to impeding the improvement of facilities that are impacted by it, has never served the purpose for which it was originally intended and that, furthermore, it has had a negative impact on nighttime AM service in the United States."

As the Petitioners document, those stations with the greatest opportunity to provide interference-free nighttime service are often harmed the most by what has often become a useless rule. The Commission's compromise language of Docket 87-267 was well-intentioned. But application of the "ratchet clause" has seldom worked in practice. When applied, often by necessity, not choice, the rule produces minimal benefit in terms of interference reduction, but seriously restricts an applicant's ability to expand nighttime coverage to the station's service area. This impediment is particularly acute when a station's nighttime pattern is non-directional, or when a protected station requiring "ratchet" treatment stands in the applicant station's directional nighttime major lobe.

When a non-directional nighttime station is forced to make a facilities change (for example, should it be forced to move tower site), compliance with the "ratchet clause", as the Petitioners note, often demands a service-compromising power reduction as the only feasible option. While an increase in antenna height will sometimes (at constant power) mitigate the level of nighttime skywave toward a protected station, in other instances it serves no technical purpose, or may actually increase interference. What's more, a taller tower may not be legally or financially feasible. And substitution of a directional array may prove of little benefit for a variety of technical or nontechnical reasons. By reducing power, the applicant broadcaster curtails nighttime coverage, subjecting the fringes of its coverage area, even its community of license, to skywave interference. As the Petitioners' calculations demonstrate, typical employment of the "ratchet clause" would generally cause more potential listeners to lose service in the applicant's community than would gain service in the community of any protected station. 4/ Any power reduction could also endanger the applicant's compliance with Commission requirements that at least 80 per cent of the community of license receive interference-free nighttime service. 5/

3/ See: REPORT & ORDER, MM Docket No. 87-267; Paragraph 71.

4/ See: Paragraphs #7 & #8 of the Petition.

There also exists a high level of inequity and unfairness to the "ratchet clause's" application. Essentially, the older a station is, the more likely it would be forced to ratchet its nighttime signal in any facilities change. Perhaps the greatest impact is experienced by the Class A clear channel broadcaster, one whose protected nighttime skywave contour extends for hundreds of kilometers in every direction, and whose radiation pattern was established in the early part of the 20th century, long before clear channel frequencies were opened to Class B nighttime operation in the 1980's. When licensed, the Class B stations agreed to accept the Class A station's interference, often substantial. Indeed, IBC's experience indicates most Class B stations on such channels receive a Class A station's signal as the primary contributor in interference calculations. Were a Class A station to make a facilities change for whatever reason, protection constraints would exist at so many azimuths as to make power reduction the only alternative. 6/ As a result, technical modifications by Class A stations have become a rarity.

But existence of the "ratchet clause" impedes many Class B (and even Class D) nighttime operators as well. As an example, IBC can cite a client of our company in the midwest, a small, independent operator, whose 500-watt nighttime Class B operation stands on the periphery of a major market. Asked to study an enhanced nighttime operation with existing towers, we ran headlong into the "ratchet clause" as it forced the reduction in radiation by ten per cent toward another Class B broadcaster at an azimuth only slightly on the shoulder of the main lobe. Any tenderable application would have required nighttime power to *drop* from 500 watts to no more than 380 watts. Any "enhancement" would have been counter-productive. Needless to say, the application was never filed.

No doubt, the engineering community can cite many other examples of projects abandoned, or never initiated, because the "ratchet clause" stands in the way. Struggling operators fail to secure the technical advantages they might otherwise receive to help them better compete. A community's listeners are denied a wider range of viable nighttime choices, AM stations with the strength to punch through skywave and deliver a listenable product. Meanwhile, those in other markets which might benefit from the interference reductions anticipated from ratcheting

5/ See: Section 73.24(i) of the Rules.

6/ Given the minimum antenna height requirements specified in Section 73.189(b)(2)(iii), most Class A stations already utilize antennas of considerable electrical height. An increase of antenna height to suppress vertical nighttime radiation at constant power is usually not a viable option to comply with the "ratchet clause."

seldom receive quantifiable advantages. And an application that would curtail coverage, rather than enhance it, is seldom submitted.

More recently-licensed stations, those allocated under the post-1991 25% RSS exclusion standard, now generally find facilities modifications easier than do more mature operations, those from which newer stations have chosen to receive interference. Additionally, many stations whose allocations were based upon pre-1991 skywave calculations, may now find their facilities contributing to another station's 50% exclusion RSS, whereas the limitation previously calculated was far less. This anomaly, posed by the revised mathematical algorithm implemented with MM Docket No. 88-508 and implemented in 1992, tends to be most pronounced with stations at relatively close geographic proximity. At short distances, the revised skywave factor calculations often rise dramatically. In IBC's example cited above, the adjusted (and increased) skywave factor was predominantly responsible for the new-found prohibited interference, even though both subject stations were established almost simultaneously.

Furthermore, with the implementation of MM Docket 87-267, the Commission, for the first time, began including *first-adjacent*, as well as co-channel, stations in nighttime RSS calculations. The change altered the interference landscape greatly. Many first-adjacent stations, previously ignored in RSS studies, suddenly became another station's primary interference contributor.

A final, yet significant, factor deserves attention, one which in recent years has made the Commission's "ratchet clause" particularly bothersome. Since September 2007, the Commission has authorized AM broadcasters to employ In Band On Channel ("IBOC") digital transmissions post-sunset.^{7/} As any listener will attest, the addition of nighttime IBOC interference has contributed significant noise to the AM broadcast spectrum, especially from high-powered first-adjacent stations. As such, the need for increased nighttime power and heftier signals to overcome IBOC interference has become more imperative than ever. The IBOC introduction has also rendered many a station's "real world" interference calculation meaningless. While licensees and engineers express varied opinions as to IBOC's benefits or drawbacks at night, few will contest the fact that nighttime AM interference is now worse than it's ever been. It stands to reason that ineffective, outdated or worthless rules which impede AM enhancement should be jettisoned at the earliest opportunity.

^{7/} See: Second REPORT & ORDER, First Order on Reconsideration and Second Further Notice of Proposed Rulemaking, MM Docket No. 99-325; Adopted March 22, 2007; AM IBOC Nighttime operations commenced September 14, 2007.

CONCLUSION:

IBC concurs with the Petitioners that:

"...the proposed change in the Rules will address a matter of high importance for AM stations wishing to remain competitive by providing better services to their local audiences at night."

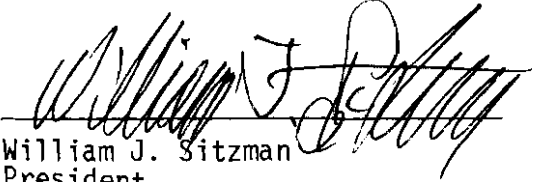
For many AM operators, especially stand-alone AM broadcasters, the question is not merely competitive strength, but also survival. Market pressures, the increased dominance of FM, and the introduction of IBOC-induced interference all impose ever-stronger impediments to success. A more potent technical presence will assuredly help the AM broadcaster stand his ground amidst economic uncertainty and allow the AM spectrum to remain viable.

Nothing in the Petitioners' proposal would compromise the integrity of existing allocation rules. Any and all new AM applicants would face the post-1991 stringent standards for (25% RSS) nighttime interference protection. Incumbent licensees could not contribute higher interference limits than they do at present. No change is proposed that would worsen interference. The proposal's only impact would be to remove a footnote of the Rules which would, *in theory*, lessen long-term interference levels, yet seldom works in practice. Except in cases where modifications are unavoidable (and which, in some instances, the "ratchet clause" has actually been waived), the voluntary reduction of nighttime interference is simply avoided by doing nothing. Licensees are thwarted from implementing meaningful change. And the level of nighttime interference remains the same.

Independent Broadcast Consultants, Inc. strongly urges the Commission to advance the instant Petition to the Rulemaking stage and/or take whatever procedural steps it deems necessary to amend the Rules to modify Section 73.182(q), Footnote 1; remove the unnecessary and ineffective "ratchet clause"; and provide greater technical opportunity to AM broadcasters and the professionals who assist them in achieving success.

Respectfully submitted,

October 7, 2009

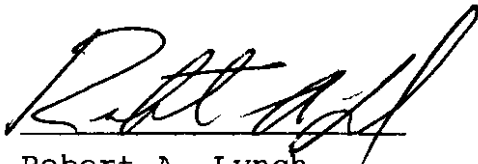

William J. Sitzman
President
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CERTIFICATE OF SERVICE

I, Robert A. Lynch, employed by the firm Independent Broadcast Consultants, Inc. Trumansburg, NY, hereby certify that on this date, October 8, 2009, copies of the foregoing Formal Comment by Independent Broadcast Consultants, Inc. in RM-11560, the Commission's invitation for comment on the Petition for Rulemaking by du Treil, Lundin & Rackley, Inc. and Hatfield and Dawson for modification of Section 73.182(q) of the Commission's Rules were sent by First Class U.S. Mail, postage prepaid, to the following:

Mr. Ronald D. Rackley, P.E.
du Treil Lundin & Rackley, Inc.
Consulting Engineers
201 Fletcher Avenue
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Mr. Benjamin F. Dawson III, P.E.
Hatfield & Dawson
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Seattle, WA 98103



Robert A. Lynch